CS-14-41

RECEIVED			
CONTRACT APPROVAL FORM	(Contract Management Use only) CONTRACT		
2014 OCT -2 PM 3: 18	TRACKING NO.		
Name:Civil Services, Inc. (CSI)			
Address: 2394 St. Johns Bluff Road S. Jacksonville, FL	· · · · · · · · · · · · · · · · · · ·		
City State Contractor's Administrator Name: Ali A. Najafi Title	Zip : <u>PE</u>		
Tel#: <u>904-309-8593</u> Fax: <u>904-645-0057</u> Email: <u>anajafi@civilservicesinc.com</u>			
CONTRACT INFORMATION Contract Name: Professional Engineering Services for CR 115A Bridge (over Lil' St. Mary's) Contract Value: 29,995 Stopped			
crutch bents at Bents 6 and 7 on the CR 115A Bridge over Little St. Mary's River.			
Contract Dates : From: <u>NTP</u> to <u>1 yr.</u> Status: <u>X</u> New <u>Renew</u> Amend			
How Procured:Sole SourceITBRFPRFQCoop.	Other Protessional Services		
If Processing an Amendment:	「「「「「「「」」」		
Contract #: Increase Amount of Existing Contract:			
New Contract Dates: to TOTAL OR AMENDMENT AMOU	NT: 👸 🖓 🖓		
APPROVALS PURSUANT TO NASSAU COUNTY PURCHASING PO 1. $0114p$ 034703 Department Head Signature Date Date Funding Source 2. $014p$ $014p$ $10-7-14$ Contract Management $10-7-14$ Date Date Date 3. $0-3-14$ Supportice of Management & Budget Date Date Date Date Date Date Date Da	541-543100 BRIDG-		
COUNTY MANAGER FINAL SIGNATURE APPROV	ZAT.		
Ted Selby 10/13 Ted Selby Date RETURN ORIGINAL(S) TO CONTRACT MANAGEMENT FOR DISTRIBUTION AS I Original: Clerk's Services; Contractor (original or certified copy) Copy: Department Office of Management & Budget Contract Management	/14 SOUNTY		
Clerk Finance	(2)		

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September 26, 2014

Mr. J. Scott Herring, P.E. Nassau County Public Works Department 96161 Nassau Place Yulee, FL 32097

Re: CR 115A Bridge over Little St. Mary's River Repair Crutch Bent Design Contract Tracking No. CM2166

Dear Mr. Herring:

Civil Services, Inc. (CSI) is pleased to submit the following proposal for providing professional engineering services for the County Road 115A Bridge over Little St. Mary's River. This Exhibit forms an integral part of the agreement between the Nassau County Board of County Commissioners (hereinafter referred to as the "COUNTY") and Civil Services, Inc. (CSI) (hereinafter referred to as the "CONSULTANT") relative to the transportation facility described as follows:

Description: The purpose of this project is to install crutch bents at Bents 6 and 7 on the CR 115A Bridge over Little St. Mary's River

I. PURPOSE

The purpose of this Exhibit is to describe the scope of work and the responsibilities of the CONSULTANT and the COUNTY in connection with design services for the above project. It shall be the CONSULTANT'S responsibility to utilize the very best engineering judgment, practices and principles possible during the prosecution of the work commissioned under this contract.

The CONSULTANT shall demonstrate good project management practices while working on this project. These include communication with the COUNTY and Florida Department of Transportation Bridge Maintenance Office and others as necessary, management of time and resources and documentation.

II. PROJECT OBJECTIVE

The project objective is that CONSULTANT will design and prepare a set of construction plans suitable for bidding purposes.

All of the design is to be conducted in accordance with the latest standard specifications adopted by AASHTO, FDOT Standard Specifications, FDOT Design Standards and directions provided by the COUNTY.

The construction plans will detail the following sections:

A. Design Approach

CSI will thoroughly review the project. The key personnel involved in designing the project will participate in field reviews. Data collection will be done at the very beginning of the project. After our sub-consultant field surveyor has completed the survey, a thorough field review by members of the design team will be accomplished to verify the field survey and to become familiar with the project details. The plan sheets anticipated include Key Sheet, Summary of Pay Items, and Typical Section sheet, Summary of Quantities, General Notes, Plan Sheet, Traffic Control Plans and Bridge Plans.

B. Roadway Design

CSI will develop roadway plans, cost estimates and recommendations for review and approval by the COUNTY and Florida Department of Transportation. CSI will perform any necessary field reviews to obtain dimensions not shown on existing plans. The roadway design shall include but not be limited to the following:

- 1. General Project Information which includes general plan and details and other miscellaneous details
- 2. Provide cost estimates.
- 3. Utilities: Address the impact of existing utilities (above or below ground) during the construction phase. Identify all impacted utilities including type, location and contact information for utility coordination.

C. Bridge Repair Plans Design

Phase I: 30% Plans

CSI will develop 30% Design Bridge Repair Plans for review and approval by the Florida Department of Transportation and COUNTY. The 30% submittal shall include but not be limited to the following:

- 1. General Project Information which includes existing bridge location
- 2. Substructures: Preliminary design of structural crutch bents at Bents 6 and 7.
- 3. The structures design will be performed with input from the Geotechnical Engineer and recommendations provided in the Geotechnical Investigation Report
- 4. Utilities: Address the impact of existing utilities for the proposed bridge repairs (if

applicable).

- 5. Design Computations, Cost Estimates and Recommendations: Provide preliminary design computations, structures quantities and construction cost estimate.
- 6. Structures submittal will include Plan and Elevation Sheet showing location of new crutch bents and Typical Bent Details for the proposed crutch bents.

Phase II: 60% Plans Submittal: N/A

Phase III: 90% Plans Submittal:

After the approval of the 30% Plans Submittal including recommended preliminary design plans, preliminary design computations, preliminary Engineer's Cost Estimate, and after resolving all the Structures Plans review comments, CSI will submit 90% Structures Plans, and Design Computations for review and approval by the County and Florida Department of Transportation. The Bridge Load Rating will not be included as part of this work. The 90% Plans Submittal will contain substantially completed design details which include but not be limited to:

- 1. Project Key sheet.
- 2. Summary of Quantities
- 3. General Notes
- 4. Plan & Elevation.
- 5. Bridge Hydraulics Recommendations to be provided by McCranie & Associates.
- 6. Foundation Layout.
- 7. Pile Data Table
- 8. Report of Core Borings
- 9. Crutch Bents Details.
- 10. Reinforcing Bar List.

Phase IV: 100% Plans Submittal:

The 100% Plans will incorporate all 90% review comments (not through ERC system) from FDOT and COUNTY and response to review comments.

D. Bridge Hydraulics Report:

The bridge scours analysis to be performed by McCranie & Associates.

Calculate hydrology, hydraulics, scour, and appropriate counter measures. Prepare report and the information for the Bridge Hydraulics Recommendation Sheet.

E. Traffic Control Plans:

The maintenance of traffic plans to be designed by McCranie & Associates. Design the appropriate Maintenance of Traffic concept. Prepare the MOT sheet(s) showing

all signage and appropriate notations per FDOT Design Standards.

F. Geotechnical Engineering:

The geotechnical engineering task will be performed by CSI Geo.

The geotechnical exploration will consist of field exploratory borings, laboratory testing, and a geotechnical analysis of the collected data. All geotechnical work will be in general accordance with the latest edition of the FDOT Soils and Foundations Handbook and related directives.

Proposed Geotechnical Exploration

<u>Field Exploration</u> - The proposed exploration will consist of geotechnical studies and the collection of subsurface data as follows:

Crutch Bents at Bents 6 and 7 - One Standard Penetration Test (SPT) boring will be performed through the existing bridge deck between bents 6 and 7. The SPT boring will be extended to a depth of 70 feet below the top of the bridge deck. The SPT boring will be sampled on 2.5-foot centers. Soil and water samples from the bridge area will also be tested for environmental classification testing. The borehole will be grouted upon completion.

Soil samples will be classified, containerized, and marked in the field and returned to the laboratory for visual inspection and classification by the geotechnical engineer using the Unified Soil Classification System.

Laboratory Testing - Laboratory classification and index soil tests will be performed as necessary on selected soil samples obtained from the exploration. Specific tests to be performed are Moisture Content, Environmental/Corrosion Testing, Percent Fines, and Gradation Tests.

Engineering/Support Services - A geotechnical engineer, registered in the State of Florida, will direct the geotechnical exploration and provide engineering analysis and evaluation of the subsurface conditions with respect to the planned construction and imposed loading conditions. The results of the exploration will be presented in a report containing the following:

- A graphical representation of the subsurface conditions encountered.
- Copies of U.S.G.S. and S.C.S. maps with project limits shown.
- An appendix that contains laboratory test data sheets, and other pertinent calculations.
- A discussion of the planned construction and imposed loading conditions.
- Written discussion of the subsurface conditions encountered.
- Evaluation of precast driven concrete piles and estimated pile tip elevations as well as preparation of Pile Data Table.
- Recommend quantity, location and length of test piles with or without instrumentation and a recommendation on the use of load tests.

The geotechnical exploration shall consist of field exploratory borings, laboratory testing, and a geotechnical analysis of the collected data. All geotechnical work shall be in general accordance with the latest edition of the Soils and Foundations Handbook and related directives.

G. Topography Survey:

The surveying effort will be performed by Geomatics Corporation.

- Survey existing bridge; including showing concrete slab joints
- Spot elevations (no contours/DTM)
- Show locations of where bridge piers enter the water under the bridge
- Extend survey to 100' each side of ends of bridge
- Survey from wood-line to wood-line (No R/W work)
- Creek cross-sections at upstream and downstream face of bridge; and 200' upstream and 200' downstream
- Top water elevation
- Elevation of High Water Stains on bridge piers
- Digital Microstation files only (no signed/sealed survey)

H. Utility Coordination:

The CSI's team will provide all utility coordination for the project. The CSI will identify which utilities exist within the corridor by calling Sunshine 811 "design" ticket listing all utility owners within the project limit. CSI will prepare a Utility Conflict Matrix for all utilities which may be impacted by construction activities. CSI will prepare the minutes of the utility meetings. CSI will review the Utility Work Schedules (if project requires it) to make sure that they are compatible with the construction plans.

The following phase submittals shall adhere to the requirements of the FDOT Roadway Plans Preparation Manual for the project:

- 1. Phase I (30%): Including 30% Bridge Plans. A preliminary estimated construction cost will be prepared.
- 2. Phase III (90%)
- 3. Phase IV (100%)

Our total engineering fee for the above referenced tasks is \$29,995.00. A breakdown of fees is shown below. Permitting, CEI and Post Design services are not included in this fee proposal.

BREAKDOWN OF PROPOSED FEES

TASK		<u>FEE</u>
I.	Roadway Design / Project Management (Civil Services, Inc.)	\$ 2,820.00
II.	Maintenance of Traffic (McCranie & Associates)	\$ 900.00
III.	Bridge Design (Civil Services, Inc.)	\$ 13,500.00
IV.	Bridge Hydraulic Report (McCranie & Associates)	\$ 3,100.00
V.	Survey Services (Geomatics Corporation)	\$ 2,000.00
VI.	Geotechnical Engineering (CSI Geo, Inc.)	\$7,675.00
TOTAL FEE		\$ 29,995.00

Upon your review and concurrence, please sign and return one copy of this proposal for our record.

Sincerely, CIVIL SERVICES, INC.

Christopher E. Morse, P.E. President

Approved: NASSAU COUNTY

7 10/13/14

Ted Setby Nassau County Manager